

## **AMENDMENTS TO THE CLAIMS:**

The following listing of claims will replace all prior versions, and listings, of claims in the captioned Application:

### **Listing Of Claims:**

Claim 1 (cancelled).

Claim 2 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the wireless device comprises an RF transmitter and wherein the controller is capable of receiving RF transmissions from the wireless device.

Claim 3 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 2, wherein in the operational mode, the wireless device transmits RF transmissions via the RF transmitter to the controller.

Claim 4 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the wireless device further comprises an IR transmitter and wherein the controller is capable of receiving IR transmissions from the wireless device.

Claim 5 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 4, wherein in the discovery mode the wireless device transmits the registration data via the IR transmitter to the controller.

Claim 6 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 3, wherein the wireless device further comprises an IR transmitter and wherein the controller is capable of receiving IR transmissions from the wireless device.

Claim 7 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 6, wherein in the discovery mode the wireless device transmits the registration data via the IR transmitter to the controller.

Claim 8 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the actuator of the wireless device comprises a mechanical control, an electrical control, a software control, a physical control, a tactile control, or an audible control.

Claim 9 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the wireless device is a wireless sensor having a sensor front end for receiving event data.

Claim 10 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 9, wherein the wireless sensor includes a non-volatile storage device for storing a serial number associated with the sensor device.

Claim 11 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 10, wherein the non-volatile storage device further stores functional parameters for the sensor front end.

Claim 12 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 9, wherein the serial number forms a part of the registration data.

Claim 13 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 12, wherein the functional parameters for the sensor device are transmitted along with the registration data.

Claim 14 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the controller returns to the operational mode automatically after at least one wireless device has been successfully registered.

Claim 15 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the controller returns to the operational mode automatically after a preselected time interval.

Claim 16 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the controller includes an actuator for switching between the operational mode and the discovery mode.

Claim 17 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 16, wherein the actuator of the controller comprises a mechanical control, an electrical control, a software control, a physical control, a tactile control, or an audible control.

Claim 18 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim [1] 20, wherein the at least one transmission of registration data comprises a first signature byte for identifying that the at least one transmission is a registration transmission.

Claim 19 (cancelled).

Claim 20 (currently amended): A method for registering and authenticating a wireless device, comprising the steps of:

providing a controller having a discovery mode and an operating mode, in the discovery mode the controller being capable of registering wireless devices, and in the operating mode the controller being capable of receiving transmissions from a wireless device that has been registered;

providing a wireless device which is capable of communicating wirelessly with the controller, the wireless device having an actuator for initiating at least one transmission of registration data, the registration data containing a unique token for verifying the identity of the wireless control device;

placing the controller into the discovery mode;

actuating the actuator of the wireless device to wirelessly transmit the registration data from the wireless device to the controller; and

returning to the operational mode of the controller,

whereby the wireless device is registered with the controller,

wherein the at least one transmission of registration data comprises a plurality of sequential transmissions, and [A method for registering and authenticating a wireless device according to claim 19,]

\_\_\_\_\_ wherein one of the registration data transmissions comprises a first signature transmission for identifying that the subsequent transmissions are registration transmissions.

Claim 21 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 20, wherein one of the registration data transmissions comprises a serial number for identifying the wireless device.

Claim 22 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 21, wherein the serial number is a unique serial number.

Claim 23 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 21, wherein one of the registration transmissions includes a second signature transmission.

Claim 24 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 21, wherein the second signature byte is identical to the first signature transmission.

Claim 25 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 23, wherein at least one of the registration transmissions comprises an additional serial number transmission.

Claim 26 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 23, wherein the at least one of the registration transmissions includes a circular redundancy check transmission.

Claim 27 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 25, wherein the at least one circular redundancy check transmission includes a plurality of circular redundancy check transmissions.

Claim 28 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 21, wherein at least one of the registration transmissions includes a circular redundancy check transmission.

Claim 29 (currently amended): [A] The method [for registering and authenticating a wireless device according to] set forth in claim 26, wherein the at least one circular redundancy check transmission includes a plurality of circular redundancy check transmissions.

Claim 30 (currently amended): A method for registering and authenticating a wireless device, comprising the steps of:

providing a controller having a discovery mode and an operating mode, in the discovery mode the controller being capable of registering wireless devices, and in the operating mode the controller being capable of receiving transmissions from a wireless device that has been registered;

providing a wireless device which is capable of communicating wirelessly with the controller, the wireless device having an actuator for initiating at least one transmission of registration data, the registration data containing a unique token for verifying the identity of the wireless control device;

placing the controller into the discovery mode;

actuating the actuator of the wireless device to wirelessly transmit the registration data from the wireless device to the controller; and

returning to the operational mode of the controller,

whereby the wireless device is registered with the controller [A method for registering and authenticating a wireless device according to claim 1], and

\_\_\_\_\_ wherein the at least one transmission of registration data includes at least nine transmissions comprising a first signature transmission, a first serial number transmission, a first data transmission, a second serial number transmission, a third serial number transmission, a second data transmission, a second signature transmission, a first circular redundancy check transmission, and a second circular redundancy check transmission.

Claim 31 (currently amended): The method [according to] set forth in claim [1] 20, wherein the data transmission includes a synchronization pulse.



Claim 32 (currently amended): The method [according to] set forth in claim 31, wherein the synchronization pulse is located at the start of each data transmission.

Claim 33 (currently amended): The method [according to] set forth in claim 31, wherein the synchronization pulse comprises at least one ON bit and at least one OFF bit.

Claim 34 (currently amended): The method [according to] set forth in claim 31, wherein the synchronization pulse comprises two ON bits and one OFF bit.

Claim 35 (currently amended): The method [according to] set forth in claim 33, wherein the controller resynchronizes at the trailing edge of the at least one ON bit.

Claim 36 (currently amended): The method [according to] set forth in claim 34, wherein the controller resynchronizes at the trailing edge of the second ON bit.

Claim 37 (currently amended): The method [according to] set forth in claim 31, wherein the controller resynchronizes at the trailing edge of the synchronization pulse.

Claim 38 (currently amended): The method [according to] set forth in claim [1] 20, wherein the wireless device comprises a primary channel transmitter and wherein the controller is capable of receiving secure primary transmission from the wireless device.

Claim 39 (currently amended): The method [according to] set forth in claim 38, wherein the wireless device further comprises a registration channel and wherein the controller is capable of receiving the registration transmissions from the wireless device.

Claim 40 (currently amended): The method [according to] set forth in claim [1] 20, wherein the data that allows the controller to operate the wireless device includes parameters, device descriptors, and rules associated with [the] operation of the wireless device.

Claim 41 (cancelled).

Claim 42 (cancelled).

Claim 43 (cancelled).

Claim 44 (cancelled).

Claim 45 (cancelled).

Claim 46 (cancelled).

Claim 47 (cancelled).

Claim 48 (cancelled).

Claim 49 (cancelled).

Claim 50 (cancelled).

Claim 51 (cancelled).

Claim 52 (cancelled).

Claim 53 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [52] 63, wherein the wireless device comprises an RF transmitter and wherein the controller is capable of receiving RF transmissions from the wireless device.

Claim 54 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 53, wherein the wireless device further comprises an IR transmitter and wherein the controller is capable of receiving IR transmissions from the wireless device.

Claim 55 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 54, wherein in the discovery mode the wireless device transmits the registration data via the IR transmitter to the controller.

Claim 56 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [52] 63, wherein the actuator of the wireless device comprises a mechanical control, an electrical control, a software control, a physical control, a tactile control, or an audible control.

Claim 57 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [52] 63, wherein the wireless device is a wireless sensor having a sensor front end for receiving event data.

Claim 58 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 57, wherein the wireless sensor includes a non-volatile storage device for storing a serial number associated with the sensor device.

Claim 59 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 57, wherein the serial number forms a part of the registration data.

Claim 60 (cancelled).

Claim 61 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [52] 63, wherein the at least one transmission of registration data comprises a plurality of sequential transmissions.

Claim 62 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 61, wherein one of the registration data transmissions comprises a serial number for identifying the wireless device.

Claim 63 (currently amended): A system for registering and authenticating a wireless device, comprising:

\_\_\_\_\_ a controller having a discovery mode and an operating mode, in the discovery mode the controller being capable of registering wireless devices, and in the operating mode the controller being capable of receiving transmissions from a wireless device that has been registered;

\_\_\_\_\_ a wireless device which is capable of communicating wirelessly with the controller, the wireless device having an actuator for initiating at least one transmission of registration data, the registration data containing a unique token for verifying the identify of the wireless control device;

whereby the wireless device is registered upon actuation of the wireless device when the controller is in discovery mode by wirelessly transmitting the registration data from the wireless device to the controller, wherein the at least one transmission of registration data comprises a first signature transmission for identifying that the at least one transmission is a registration data transmission [A system for registering and authenticating a wireless device according to claim 62], and wherein one of the registration data transmissions includes a second signature transmission.

Claim 64 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [62] 63, wherein the second signature [byte] transmission is identical to the first signature transmission.

Claim 65 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 63, wherein at least one of the registration data transmissions comprises an additional serial number transmission.

Claim 66 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim 63, wherein the at least one of the registration data transmissions includes a circular redundancy check transmission.

Claim 67 (currently amended): [A] The system [for registering and authenticating a wireless device according to] set forth in claim [52] 63, wherein the at least

one [transmission of] registration data transmission includes at least nine transmissions comprising a first signature transmission, a first serial number transmission, a first data transmission, a second serial number transmission, a third serial number transmission, a second data transmission, a second signature transmission, a first circular redundancy check transmission, and a second circular redundancy check transmission.

Claim 68 (currently amended): [A] The system [according to] set forth in claim [52] 63, wherein the data transmission includes a synchronization pulse.

Claim 69 (currently amended): [A] The system [according to] set forth in claim 68, wherein the synchronization pulse is located at the start of each data transmission.

Claim 70 (currently amended): [A] The system [according to] set forth in claim [52] 63, wherein the synchronization pulse comprises at least one ON bit and at least one OFF bit.

Claim 71 (currently amended): [A] The system [according to] set forth in claim [52] 63, wherein the data that allows the controller to operate the wireless device includes parameters, device descriptors, and rules associated with [the] operation of the wireless device.

Claim 72 (cancelled).